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Tucker et al.

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(54) **NON-CHROMATE METAL SURFACE
ETCHING SOLUTIONS**

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H01L 21/302; C03C 15/00

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216/100; 216/102; 216/105

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252/79.3; 438/745; 216/100, 102, 105,
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(57) **ABSTRACT**

Non-chromate solutions for treating and/or etching metals,
particularly, aluminum, aluminum alloys, steel and titanium,
and method of applying same wherein the solutions include
either a titanate or titanium dioxide as a “drop-in replace-
ment” for a chromium-containing compound in a metal
surface etching solution that otherwise would contain chro-
mium.

4 Claims, No Drawings